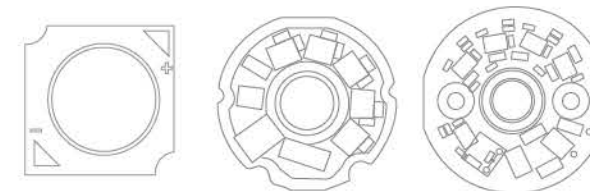


EDISON LED COB Catalog



Lighting Design Manufacturing Service

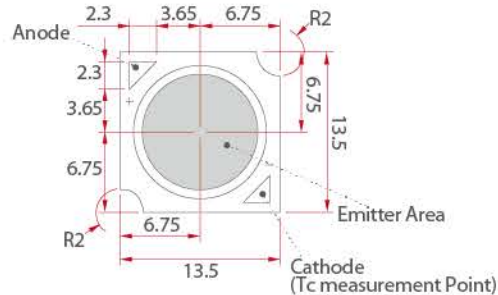
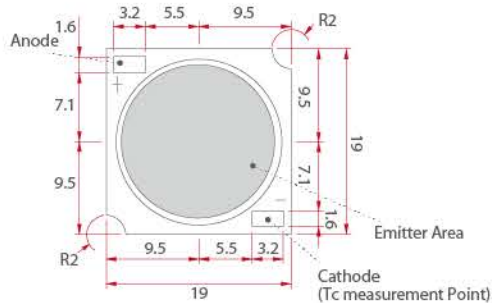
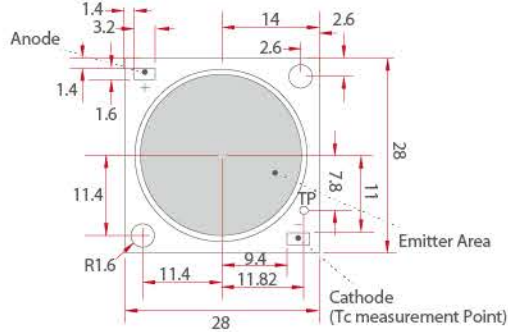
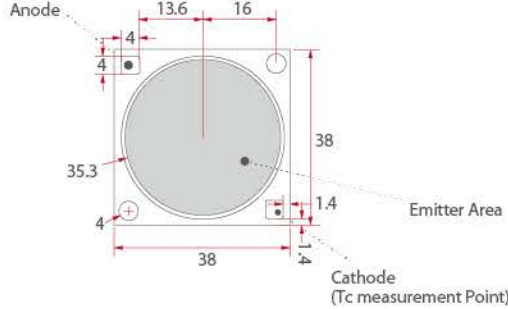
w w w . e d i s o n - o p t o . c o m

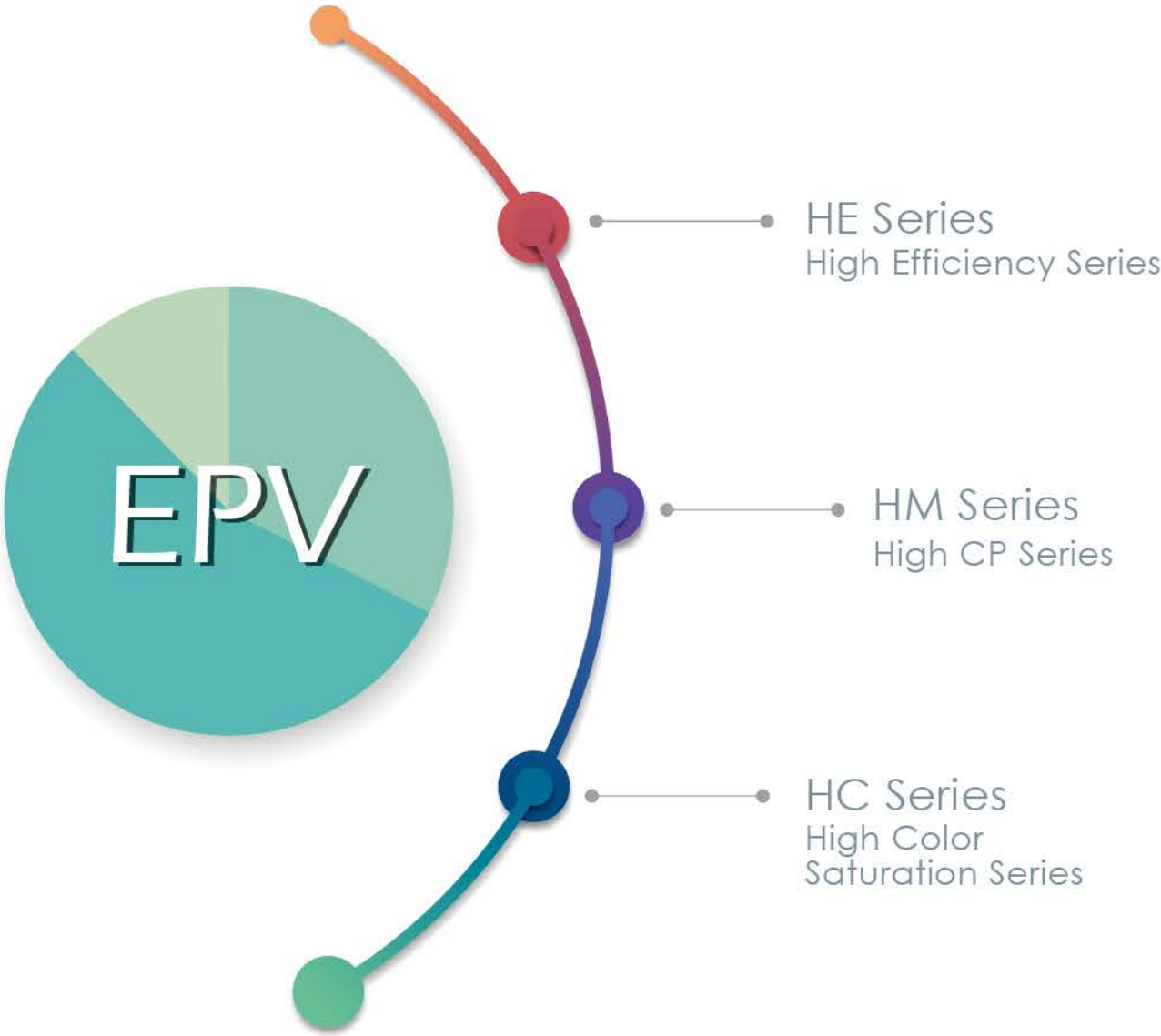
COB Contents

Edipower V HE & HM Series	02
Edipower V HC Series	06
Dimming Series <i>Dim to Warm/ Dim to Neutral White</i>	10
Edipower III SL Series	15
Edipower III HD Series	18
AC COB Series	20

Edipower Series Dimension



Type	Appearance (Actual size)	Outline drawing (Unit : mm)
3~30W	 13.5mm*13.5mm LES Φ9.8	 Anode 2.3 3.65 6.75 R2 2.3 3.65 6.75 13.5 6.75 6.75 R2 13.5 Emitter Area Cathode (Tc measurement Point)
15~70W	 19mm*19mm LES Φ15.6	 Anode 1.6 3.2 5.5 9.5 R2 7.1 9.5 19 9.5 7.1 1.6 R2 9.5 5.5 3.2 19 Emitter Area Cathode (Tc measurement Point)
30~180W	 28mm*28mm LES Φ23.1	 Anode 1.4 3.2 14 2.6 1.4 1.6 2.6 11.4 28 11.4 9.4 11.82 11 R1.6 28 Emitter Area Cathode (Tc measurement Point)
120~355W	 38mm*38mm LES Φ33.9	 Anode 13.6 16 4 4 35.3 38 4 1.4 38 1.4 Emitter Area Cathode (Tc measurement Point)



High Efficiency Series

Edipower V

LM80
PASS

CEC

ErP

HE & HM Series



Normal	EPV
Efficacy-3000K CRI80_140-145lm/W CRI90_115-120lm/W	CRI80_160-170lm/W CRI90_135-140lm/W
Thermal Resistance 1.046°C/W	0.404°C/W
Surface of Phosphor Glue 200°C	150°C
Wattage Range 5~150W	3~355W
Chromaticity Range 5-Step	3-Step

20%
UP60%
Down50°C
Down

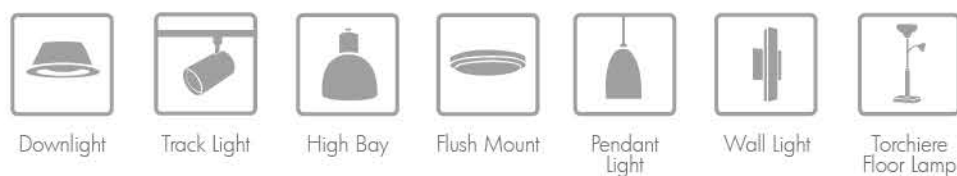
Complete

Upgraded

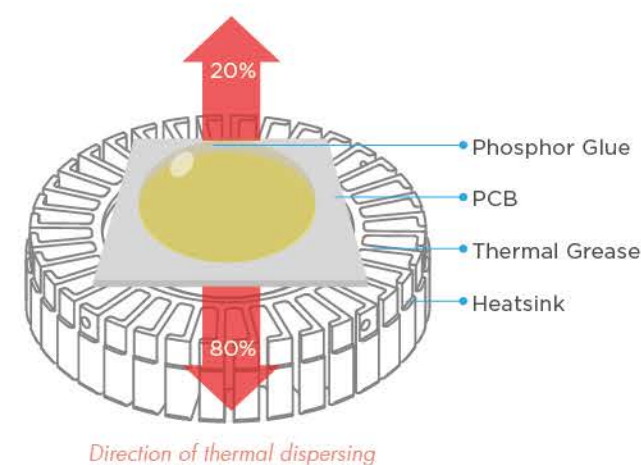
Description

- High efficiency of 165 lm/@ 3000K CRI 80 and 140 lm/W @3000K CRI 90
- At 85/105°C, L70 50000hrs of LM80 testing has been completed
- Comply with Erp (CRI > 80 & R9 > 0) and CEC (CRI > 90 & R9 > 50)
- Wide Range of power consumption from 3W to 355W
- At Tj = 85, color consistency is compliant with 3-step MacAdam

Application



Temperature on the surface of phosphor glue can be decreased by 30% (30-50°C)



	Normal	EPV
Surface of phosphor glue	205.1°C	164.7°C
Temperature Difference	94.1°C	36.4°C
PCB	111.0°C	128.3°C
Temperature Difference	11.4°C	11.6°C
Heatsink	99.6°C	116.7°C
Rth	1.046°C/W	0.404°C/W

NEW

Specifications

HE Series

Order Code	Dimension (mm)	LES (mm)	Power (W)	CCT (K)	CRI	Typ. Flux(lm)	lm/W	VF(V)	IF(mA)
2PHE03WW27P32020	13.5*13.5*0.9	Φ9.8	3.1~6.8	3000	80	496	158	34.8	90~180
2PHE06WW27P32020			6.1~13.5			974	155	34.8	180~360
2PHE09WW27P32020			9.2~20.3			1458	155	34.8	270~540
2PHE13WW27P32020			12.2~27.0			1931	154	34.8	360~720
2PHE15WW27P34020	19*19*0.9	Φ15.6	15.3~33.8			2519	161	34.8	450~900
2PHE18WW27P34020			18.3~40.5			3013	160	34.8	540~1080
2PHE24WW27P34020			24.5~54.0			4054	162	34.8	720~1440
2PHE30WW27P34020			30.6~67.5			5038	161	34.8	900~1800
2PHE33WW27P35020	28*28*0.9	Φ23.1	33.7~74.3			5591	162	34.8	990~1980
2PHE36WW27P35020			36.7~81.0			6087	162	34.8	1080~2160
2PHE55WW27P35020			55.1~119.0			9070	161	52.2	1080~2160
2PHE60WW27P35020			59.6~128.6			9873	162	37.7	1620~3240
2PHE83WW27P35020	38*38*0.9	Φ33.9	82.7~178.5			13511	160	52.2	1620~3240
2PHEA2WW27P29020			115.0~248.0			19205	164	52.2	2250~4500
2PHEA6WW27P29020			165.4~356.7			27222	161	104.4	1620~3240
2PHE03WW38P32020	13.5*13.5*0.9	Φ9.8	3.1~6.8	3000	90	422	134	34.8	90~180
2PHE06WW38P32020			6.1~13.5			828	132	34.8	180~360
2PHE09WW38P32020			9.2~20.3			1239	132	34.8	270~540
2PHE13WW38P32020			12.2~27.0			1641	131	34.8	360~720
2PHE15WW38P34020	19*19*0.9	Φ15.6	15.3~33.8			2141	137	34.8	450~900
2PHE18WW38P34020			18.3~40.5			2561	136	34.8	540~1080
2PHE24WW38P34020			24.5~54.0			3446	138	34.8	720~1440
2PHE30WW38P34020			30.6~67.5			4282	137	34.8	900~1800
2PHE33WW38P35020	28*28*0.9	Φ23.1	33.7~74.3			4752	138	34.8	990~1980
2PHE36WW38P35020			36.7~81.0			5174	138	34.8	1080~2160
2PHE55WW38P35020			55.1~119.0			7710	137	52.2	1080~2160
2PHE60WW38P35020			59.6~128.6			8392	138	37.7	1620~3240
2PHE83WW38P35020	38*38*0.9	Φ33.9	82.7~178.5			11484	136	52.2	1620~3240
2PHEA2WW38P29020			115.0~248.0			16324	139	52.2	2250~4500
2PHEA6WW38P29020			165.4~356.7			23139	137	104.4	1620~3240

Specifications

HM Series

Order Code	Dimension (mm)	LES (mm)	Power (W)	CCT (K)	CRI	Typ. Flux(lm)	lm/W	VF(V)	IF(mA)
2PHE03WW27P32020	13.5*13.5*0.9	Φ9.8	3.1~6.8	3000	80	486	155	34.8	90~180
2PHE06WW27P32020			6.1~13.5			955	152	34.8	180~360
2PHE09WW27P32020			9.2~20.3			1429	152	34.8	270~540
2PHE13WW27P32020			12.2~27.0			1892	151	34.8	360~720
2PHE15WW27P34020	19*19*0.9	Φ15.6	15.3~33.8			2469	157	34.8	450~900
2PHE18WW27P34020			18.3~40.5			2953	157	34.8	540~1080
2PHE24WW27P34020			24.5~54.0			3972	158	34.8	720~1440
2PHE30WW27P34020			30.6~67.5			4937	157	34.8	900~1800
2PHE33WW27P35020	28*28*0.9	Φ23.1	33.7~74.3			5479	159	34.8	990~1980
2PHE36WW27P35020			36.7~81.0			5965	158	34.8	1080~2160
2PHE55WW27P35020			55.1~119.0			8888	157	52.2	1080~2160
2PHE60WW27P35020			59.6~128.6			9675	158	37.7	1620~3240
2PHE83WW27P35020	38*38*0.9	Φ33.9	82.7~178.5			13241	156	52.2	1620~3240
2PHEA2WW27P29020			115.0~248.0			18821	160	52.2	2250~4500
2PHEA6WW27P29020			165.4~356.7			26677	157	104.4	1620~3240
2PHE03WW38P32020	13.5*13.5*0.9	Φ9.8	3.1~6.8	3000	90	413	132	34.8	90~180
2PHE06WW38P32020			6.1~13.5			812	129	34.8	180~360
2PHE09WW38P32020			9.2~20.3			1215	129	34.8	270~540
2PHE13WW38P32020			12.2~27.0			1608	128	34.8	360~720
2PHE15WW38P34020	19*19*0.9	Φ15.6	15.3~33.8			2099	133	34.8	450~900
2PHE18WW38P34020			18.3~40.5			2510	133	34.8	540~1080
2PHE24WW38P34020			24.5~54.0			3376	134	34.8	720~1440
2PHE30WW38P34020			30.6~67.5			4196	133	34.8	900~1800
2PHE33WW38P35020	28*28*0.9	Φ23.1	33.7~74.3			4657	135	34.8	990~1980
2PHE36WW38P35020			36.7~81.0			5070	134	34.8	1080~2160
2PHE55WW38P35020			55.1~119.0			7555	133	52.2	1080~2160
2PHE60WW38P35020			59.6~128.6			8224	134	37.7	1620~3240
2PHE83WW38P35020	38*38*0.9	Φ33.9	82.7~178.5			11255	133	52.2	1620~3240
2PHEA2WW38P29020			115.0~248.0			15998	136	52.2	2250~4500
2PHEA6WW38P29020			165.4~356.7			22675	133	104.4	1620~3240

High Color Saturation Series

Edipower V HC Series

CEC

TM30

Recommended for: Museums, studios, printings, paint factories,
business premises (clothing stores, boutique stores)



Description

- High efficiency up to 125lm / W @ CRI 95
- Low thermal resistance
- On B.B. Locus: Satisfy Ansi Specification
- Good color uniformity, compliant with 3 step MacAdam ellipse
- Excellent and saturated color, IES-TM-30-15 & CQS compliant
- Rf (Color Fidelity) = 95 & Rg (Gamut) = 105 & R1~R15 > 90
- At Tj=85 C, color consistency is compliant with 3-step MacAdam

Application



Downlight



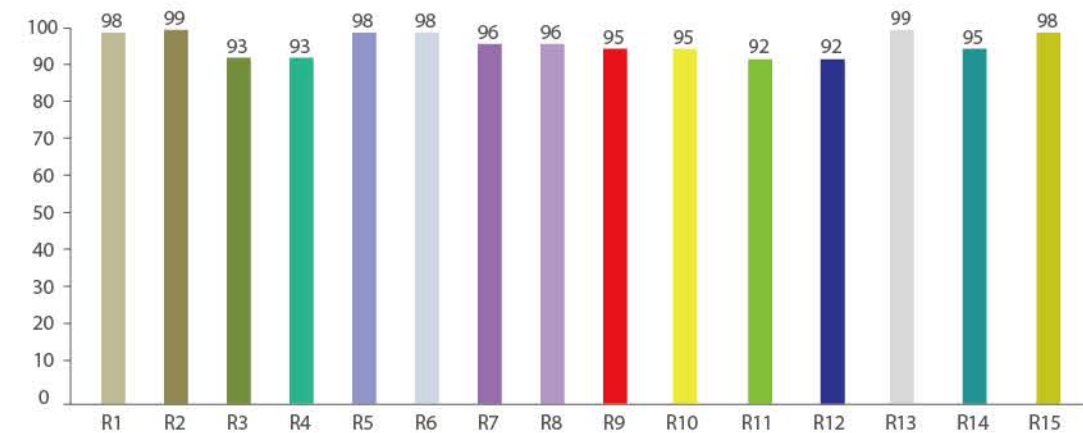
Track Light



Pendant Light

Super High CRI

- 3000K CRI>95 R1~R15>90, Rf=93~97 Rg=103~110

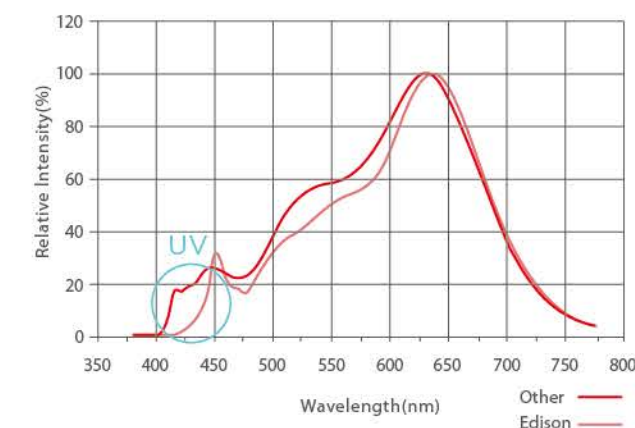


- On B.B.L
- 3-Step binning
- Various choices of color temperature (2700K, 3000K, 4000K, 5000K, 5700K and 6500K)
- Satisfy IES-TM 30 standard (Rf = 93~97, Rg = 103~110)
- CEC certification approved
- Produces no ultraviolet light
- NO ultraviolet light



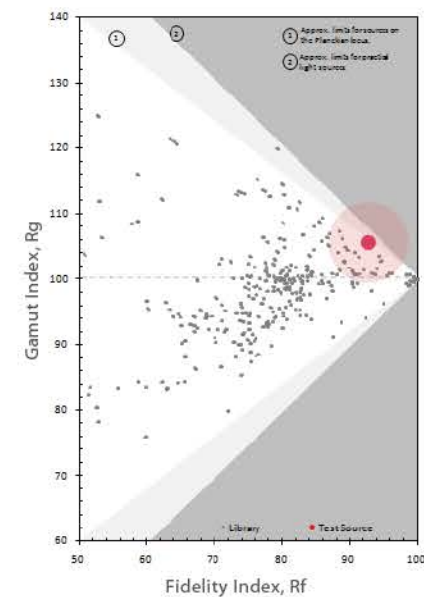
Competitors

- On B.B.L
- 3-Step binning
- Fewer choices of color temperature (3000K, 4000K, and 5000K)
- Only available in high CRI >97
- Costly
- Produces ultraviolet light



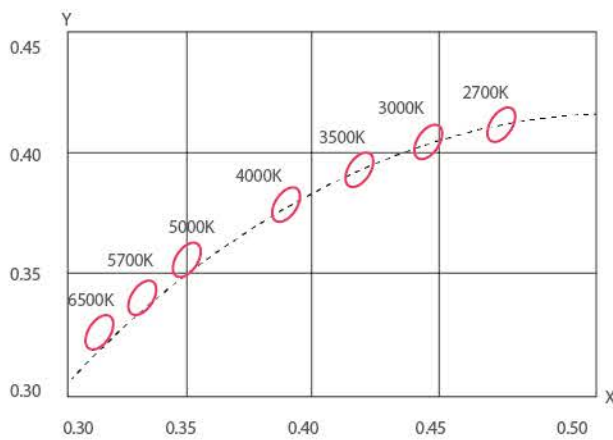
High Color Saturation

- Excellent Choice ($R_f > 90$, $R_g \leq 110$)



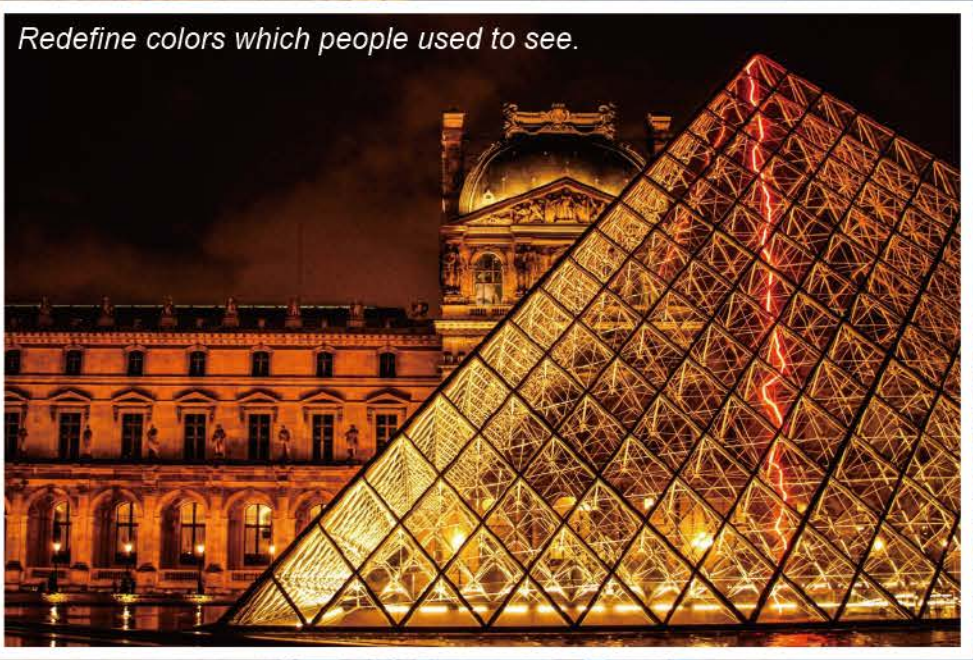
On B.B.Lous

- Satisfy Ansi Specification
Color consistency is compliant with 3-step MacAdam



Specifications

Order Code	Dimension (mm)	LES (mm)	Power (W)	CCT (K)	CRI	Typ. Flux(lm)	lm/W	VF(V)	IF(mA)
2PHE03WW56P32020	13.5*13.5*0.9	Φ9.8	3.1~6.8	3000	95	390	125	34.4	90~180
2PHE06WW56P32020			6.1~13.5			760	125	34.8	180~360
2PHE09WW56P32020			9.2~20.3			1150	125	34.8	270~540
2PHE13WW56P32020			12.2~27			1525	125	34.8	360~720
2PHE15WW56P34020	19*19*0.9	Φ12.1	15.3~33.8			1910	125	34.8	450~900
2PHE18WW56P34020			18.3~40.5			2285	125	34.8	540~1080
2PHE24WW56P34020			24.5~54			3060	125	34.8	720~1440
2PHE30WW56P34020			30.6~67.5			3825	125	34.8	900~1800
2PHE33WW56P35020	28*28*0.9	Φ23.1	33.7~74.3			4210	125	34.8	990~1890
2PHE36WW56P35020			36.7~81			4585	125	34.8	1080~2160
2PHE55WW56P35020			55.1~119			6885	125	52.2	1080~2160
2PHE60WW56P35020			59.6~128.6			7450	125	37.7	1620~3240
2PHE83WW56P35020	38*38*0.9	Φ33.9	82.7~178.5			10335	125	52.2	1620~3240
2PHEA2WW56P29020			115~248			14375	125	52.2	2250~4500
2PHEA6WW56P29020			165.4~356.7			20675	125	104.4	1620~3240





Dimming Series

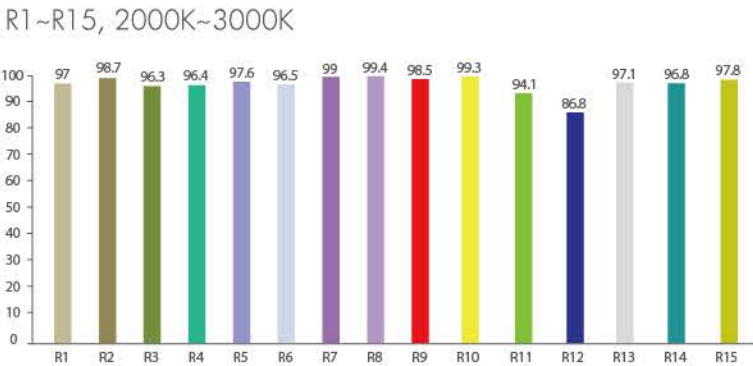
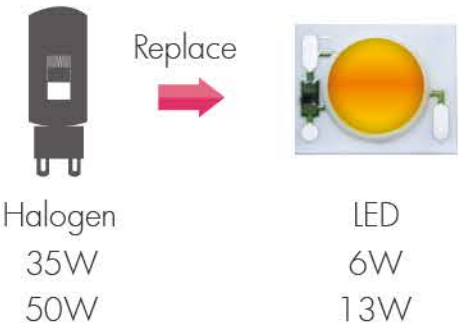


Dim to Warm/ Dim to Neutral White



Description

- Alike the effect of halogen lamps, it's easy to switch color temperature from 2000K to 3000K or from 2700K to 4000K with Dimming Series
- High CRI (CRI=95, R9=85) and good color uniformity
- High efficiency of 85~100 lm/W
- Suitable for general lighting and scenario lighting applications



Dim to Warm Series 2000K to 3000K

CRI	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
97.7	97.0	98.7	96.3	96.9	97.6	96.5	99.0	99.4	98.5	99.3	94.1	86.8	97.1	96.8	97.8

Dim to Neutral White Series 2700K to 4000K

CRI	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95.5	96.4	95.2	91.8	96.9	94.9	91.7	97.7	96.4	87.0	86.9	95.9	72.3	95.9	94.9	96.0

Specifications

Order Code	Dimension (mm)	LES (mm)	Power (W)	CCT (K)	CRI	Typ. Flux(lm)	lm/W	VF(V)	IF(mA)
2PDW13WW49P49001	12*15*1	Φ8.6	0.9	2000	92.3	70	75	29	30
			12.9	3000	97.7	1105	90	36.9	350
2PDW06WW49P49001	12*15*1	Φ8.6	1.1	2000	92.0	65	60	15	70
			6.3	3000	97.9	565	90	18.2	350
2PDW13NW49P49001	12*15*1	Φ8.6	0.9	2700	95.6	85	95	29	30
			12.9	4000	96.2	1295	100	36.9	350
2PDW06NW49P49001	12*15*1	Φ8.6	1.1	2700	96.5	80	75	15	70
			6.3	4000	95.3	660	105	18.2	350

Application



Downlight



Spot Light



Residential Light



Commercial Light

Dim the room to warmer tone

Special Lighting Series

Edipower III SL Series

Enhance the visual appeal of merchandise effectively



Description

Provides five kinds of components to emphasize specific colors of different objects, including skin, meat, bread, clothes, seafood, and vegetables

RUBY

- Enhances the red color in fresh meat and flowers.
- Recommended for: Fresh meat, dark meat, and goods with red appearance.



SNOW WHITE

- Presents clean and pure texture of fabric or clothes.
- Recommended for: Irradiate at fabric, clothing, paint.



AROMA

- Emphasizes the yellow, orange, and gold colors in ingredients.
- Recommended for: Bread, cheese, champagne, wine, and color of yellow ingredient.



Description

MELA

- Shows soft and smooth appearance.
- Perfect for department stores or super markets.
- Recommended for: Skin, brigh or colorful fabrics and goods, etc.



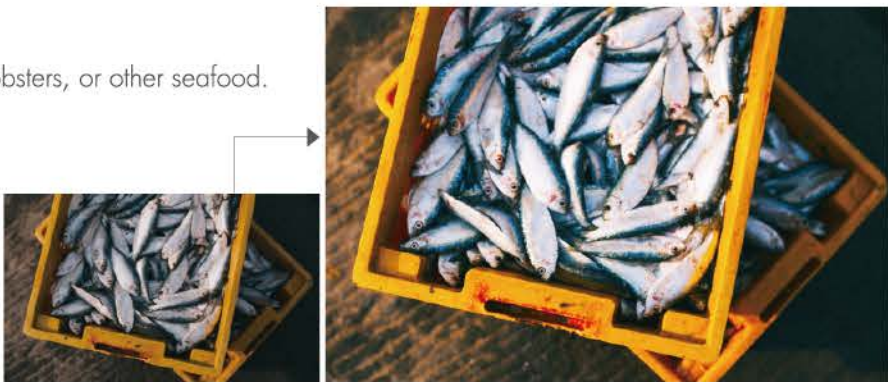
VEGETABLES

- Reveals the green color in vegetables and fruits.
- Recommended for: Vegetables and fruits.



SEAFOOD

- Highlights freshness of fish, crabs, lobsters, or other seafood.
- Rcommended for: seafood.



Specifications

Order Code	Dimension (mm)	LES (mm)	Power (W)	CCT (K)	CRI	Typ. Flux(lm)	lm/W	VF(V)	IF(mA)
2PSL30RW57P34010	19*19*0.9	Φ15.6	31.3	1800	80	2815	90	34.8	900
2PSL40RW57P35010	28*28*0.9	Φ23.1	41.8			3760	90	34.8	1200
2PSL30SW57P34010	19*19*0.9	Φ15.6	31.3	3000		4380	140	34.8	900
2PSL40SW57P35010	28*28*0.9	Φ23.1	41.8			5850	140	34.8	1200
2PSL30VW57P34010	19*19*0.9	Φ15.6	31.3	2800	90	4065	130	34.8	900
2PSL40VW57P35010	28*28*0.9	Φ23.1	41.8			5430	130	34.8	1200
2PSL30AW57P34010	19*19*0.9	Φ15.6	31.3	2600		3910	125	34.8	900
2PSL40AW57P35010	28*28*0.9	Φ23.1	41.8			5225	125	34.8	1200
2PSL30MW57P34010	19*19*0.9	Φ15.6	31.3	4500		4065	130	34.8	900
2PSL40MW57P35010	28*28*0.9	Φ23.1	41.8			5430	130	34.8	1200
2PSL30FW57P34010	19*19*0.9	Φ15.6	31.8	6000		4065	130	34.8	900
2PSL40FW57P35010	28*28*0.9	Φ23.1	41.8			5430	130	34.8	1200

Application



Downlight



Track Light



Pendant Light



High Density Series

Edipower III

CEC TM30

HD Series



Application



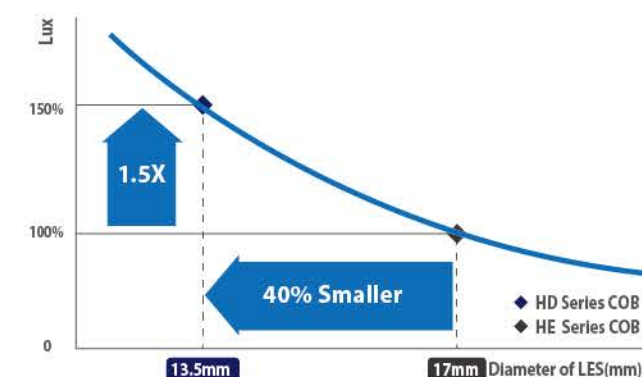
Downlight



Track Light

Description

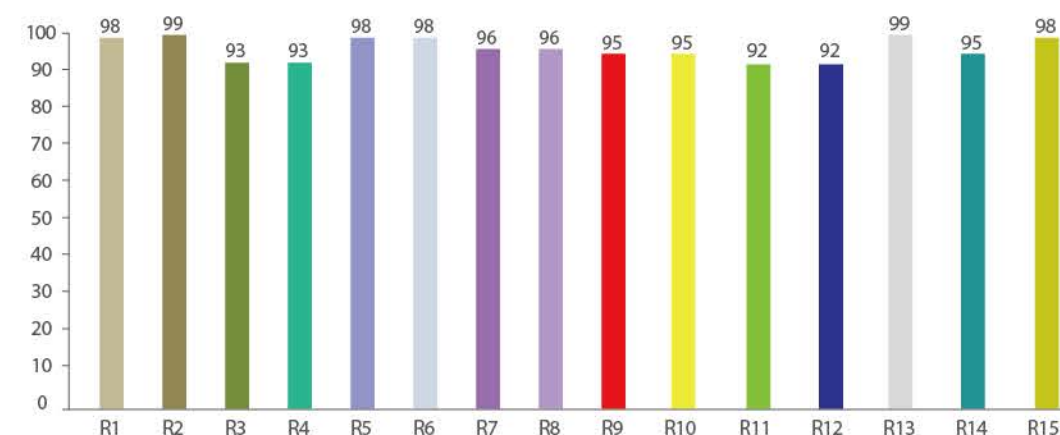
- Small light emitting surface(LES)
- Produces higher flux intensity and wattage output
- Suitable for luminaires with narrow beam angle
- Excellent and saturated color, IES-TM-30-15 & CQS compliant
- Rf (Color Fidelity) = 95 & Rg (Gamut) = 105 & R1~R15 > 90
- At Tj=85°C, color consistency is compliant with 3-step MacAdam



Compared with traditional LEDs, High Density Series is able to give off high brightness within smaller emitting area.

Super High CRI

- 3000K CRI>95 R1~R15>90, Rf=93~97 Rg=103~110



Specifications

Order Code	Dimension (mm)	LES (mm)	Power (W)	CCT (K)	CRI	Typ. Flux(lm)	lm/W	VF(V)	IF(mA) (Typ.)
2PHD35WW56P42001	19*19	Φ12.1	35	3000	95	3125	85	36.6	970

AC COB Module Series



Application



Downlight



Track Light



Pendant Light

AC COB PHI 33 Series

- Works in 120/230V environment.
- Compatible with TRIAC dimmers.
- Excellent color consistency is compliant with 3-step MacAdam ellipse.
- Extends module lifetime with over-temperature protection (OTP) mechanism
- Efficacy up to 105 lm/W @ CRI 80; 95 lm/W @ CRI 90



■ 120V 7/10/12/14W



■ 230V 7/10/12/14W

Specifications

Order Code	Dimension (mm)	LES (mm)	Input Voltage	Power (W)	CCT (K)	CRI	Typ. Flux(lm)	lm/W	PF	THD	Percent Flicker(%)	Dimming
2DAACN8012073002	Φ33*0.9	Φ8.6	120	7	3000	80	785	113	> 0.95	< 20	100	Triac
2DAACN8012103002				10			1095	108				
2DAACN8012123002				12			1235	103				
2DAACN8012143002				14			1395	98				
2DAACN8023073002			230	7			835	118				
2DAACN8023103002				10			1110	113				
2DAACN8023123002				12			1340	113				
2DAACN8023143002				14			1475	108				
2DAACN9012073002			120	7		90	670	98				
2DAACN9012103002				10			930	93				
2DAACN9012123002				12			1050	88				
2DAACN9012143002				14			1190	88				
2DAACN9023073002			230	7			710	103				
2DAACN9023103002				10			945	98				
2DAACN9023123002				12			1140	98				
2DAACN9023143002				14			1260	93				

AC COB PHI 48 Series



- Works in 120/230V environment
- Compatible with TRIAC dimmers
- Excellent color consistency is compliant with 3-step MacAdam ellipse
- Extends module lifetime with over-temperature protection (OTP) mechanism
- Efficacy up to 100 lm/W @ CRI 80; 90 lm/W @ CRI 90



- 120V 20/30/40W
- 230V 20W

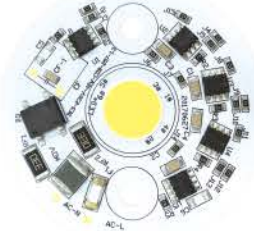
Specifications

Order Code	Dimension (mm)	LES (mm)	Input Voltage	Power (W)	CCT (K)	CRI	Typ. Flux(lm)	lm/W	PF	THD	Percent Flicker(%)	Dimiming
2DAACN8012203002	Φ48*0.9	Φ11.6	120	20	3000	80	2095	105	> 0.95	< 20	100	Triac
2DAACN8012303002				30			2900	100				
2DAACN8012403002				40			3665	95				
2DAACN8023203002			230	20		90	2205	110				
2DAACN9012203002				20			1780	90				
2DAACN9012303002			120	30			2465	85				
2DAACN9012403002				40			3115	80				
2DAACN9023203002			230	20			1875	95				

AC COB PHI 57 Series



- Works in 230V environment
- Compatible with TRIAC dimmers
- Excellent color consistency is compliant with 3-step MacAdam ellipse
- Extends module lifetime with over-temperature protection (OTP) mechanism
- Efficacy up to 95 lm/W @ CRI 80; 85 lm/W @ CRI 90



- 230V 30/40W

Specifications

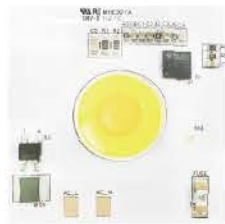
Order Code	Dimension (mm)	LES (mm)	Input Voltage	Power (W)	CCT (K)	CRI	Typ. Flux(lm)	lm/W	PF	THD	Percent Flicker(%)	Dimiming
2DAACN8023303002	Φ57*0.9	Φ11.6	230	30	3000	80	3060	102	> 0.95	< 10	100	Triac
2DAACN8023403002				40			3880	97				
2DAACN9023303002				30		90	2610	87				
2DAACN9023403002				40			3280	82				

AC COB Dim to warm Series

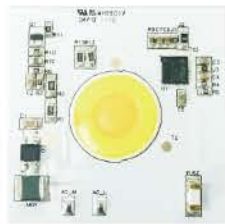
- Easy to adjust brightness from 100% to 10%
- Alike halogen lamps, this module with high CRI (CRI=95, R9 >90) is able to adjust color temperature between 3000K and 2000K
- Compatible with TRIAC dimmers
- Extends module lifetime with over-temperature protection (OTP) mechanism
- Efficacy up to 85 lm/W @ CRI 95



■ 230V 7/10/12/14W



■ 120V 20W



■ 230V 20W



Specifications

Order Code	Dimension (mm)	LES (mm)	Input Voltage	Power (W)	CCT (K)	CRI	Typ. Flux(lm)	lm/W	PF	THD	Percent Flicker(%)	Dimming
2DATCN9023073002	Φ33*0.9	Φ8.6	230	7	3000	95	570	80	> 0.95	< 20	100	Triac
2DATCN9023103002				10			770	80				
2DATCN9023123002				12			925	80				
2DATCN9023143002				14			1030	75				
2DATP59012203001	50*50*1.15	Φ18.6	120	20	3000	95	1690	85	> 0.95	< 20	100	Triac
2DATP59023203001			230				1770	90				



Special Features for versatile luminaire designs



we light up your ideas.

Via Lago Trasimeno, 21 - Schio (Vicenza)
Tel. +39 0445 579035
www.believe.it
info@believe.it